

WHAT IS CLAIMED IS:

1. A transparent film which exhibits a predetermined finished color tone comprising:

a transparent film layer which exhibits a color deficiency in at least one of hue, chroma and value as compared to the predetermined finished color tone; and
at least one pigment visually associated with the film layer and exhibiting a matching color tone satisfying the color deficiency of said film layer to thereby impart to the composite film the predetermined finished color tone when the film and at least one pigment are viewed collectively as a unit.

2. The transparent film of claim 1, wherein said at least one pigment is dispersed throughout a transparent color-matching layer adjacent said film layer.

3. The transparent film of claim 1, wherein said film layer is a thermoplastic.

4. The transparent film of claim 3, wherein said thermoplastic film layer is polyethylene terephthalate.

5. The transparent film of claim 1, wherein said at least one pigment is homogeneously dispersed as a blend throughout the transparent film layer.

6. The transparent film of claim 2, wherein the film layer has a yellow color deficiency, and wherein the color-matching layer includes a dispersion of a yellow-colored pigment.
7. The transparent film of claim 6, wherein the pigment is an iron oxide.
8. The transparent film of claim 1, further comprising a protective coating layer on the film layer.
9. The transparent film of claim 1, wherein said film layer includes first and second film layers laminated to one another.
10. The transparent film of claim 9, further comprising a protective coating layer of the film layer.
11. The transparent film of claim 1, wherein said film layer includes a metallized layer.
12. The transparent film of claim 1, wherein said pigment has an average particle size of less than about 0.50 μm .
13. The transparent film of claim 1, wherein the pigment has have an average particle size of less than about 0.10 μm .
14. The transparent film of claim 1, wherein the pigment has have an average particle size of less than about 0.05 μm .

15. The combination comprised of a glass substrate, and affixed thereto, a transparent film according to claim 1.

16. A transparent composite film having a finished gray color tone comprising:

a transparent polyester terephthalate film layer which is dyed to exhibit a selected color tone having a color deficiency in at least one of red, blue and yellow color tones as compared to the finished gray color tone of the composite film; and

a transparent color-matching layer adjacent said film layer containing a pigment which exhibits a matching color tone satisfying the color tone deficiency of said film layer.

17. The transparent composite film of claim 16, wherein said film layer exhibits a yellow color deficiency, and wherein said pigment has a yellow color tone which satisfies the yellow color deficiency of the film layer.

18. The transparent composite film of claim 16, wherein the color-matching layer is comprised of an adhesive with the pigment dispersed homogeneously throughout the adhesive.

19. The transparent composite film of claim 18, further comprising a protective coating adjacent to the film layer on a side opposite to the color matching layer.

20. The transparent composite film of claim 16, wherein the color-matching layer is a protective polymeric layer adjacent to the film layer with the pigment dispersed homogeneously throughout the protective polymeric layer.

21. The transparent composite film of claim 16, wherein the film layer includes first and second thermoplastic film layers, and an adhesive laminating layer positioned between and laminating the first and second thermoplastic film layers to one another.

22. The transparent composite film of claim 21, wherein the adhesive layer comprises said color-matching layer such that said pigment is dispersed homogeneously throughout said adhesive layer.

23. The transparent film of claim 16, wherein said pigment has an average particle size of less than about 0.50 μm .

24. The transparent film of claim 16, wherein the pigment has have an average particle size of less than about 0.10 μm .

25. The transparent film of claim 16, wherein the pigment has have an average particle size of less than about 0.05 μm .

26. The combination comprising a glass substrate, and affixed thereto, a transparent composite film according to claims 16.

27. A process for making a transparent film which exhibits a predetermined finished color tone comprising the steps of:

- (a) providing a transparent film layer which exhibits a color deficiency in at least one of hue, chroma and value as compared to the predetermined finished color tone; and
- (b) visually associating with said film layer at least one pigment exhibiting a matching color tone satisfying the color deficiency of said film layer and thereby imparting to the composite film the predetermined finished color tone when the film and color-matching layers are viewed collectively as a unit.

28. The process of claim 27, wherein step (b) includes dispersing the pigment homogeneously throughout an adhesive to form an adhesive pigment dispersion, and then forming a layer of the adhesive pigment dispersion adjacent to the film layer.

29. The process of claim 27, wherein step (b) includes dispersing the pigment homogeneously throughout a curable polymeric coating material to form a coating pigment dispersion, forming a layer of the curable coating pigment dispersion adjacent to the film layer, and curing the coating pigment dispersion to form a protective hard coating thereon.

30. The process of claim 27, wherein step (a) includes providing first and second film layers, and laminating said first and second film layers to one another with a laminating adhesive, and wherein step (b) includes dispersing the pigment homogeneously throughout the laminating adhesive to form a laminating adhesive pigment dispersion.

31. The process of claim 27, wherein step (b) includes dispersing the pigment throughout the film layer.

32. The process of claim 27, wherein the pigment has an average particle size of less than about 0.50 μm .

33. The transparent film of claim 27, wherein the pigment has have an average particle size of less than about 0.10 μm .

34. The process of claim 27, wherein the pigment has an average particle size of less than about 0.05 μm .